

Ford Chemical

LABORATORY, INC.

Bacteriological and Chemical Analysis

40 WEST LOUISE AVENUE
SALT LAKE CITY, UTAH 84115
PHONE 485-5761

File Diatex (Placer Mine)
ACT/019/011

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CERTIFICATE OF ANALYSIS
81-004695

RECEIVED

MAY 21 1981

DIVISION OF
OIL, GAS & MINING

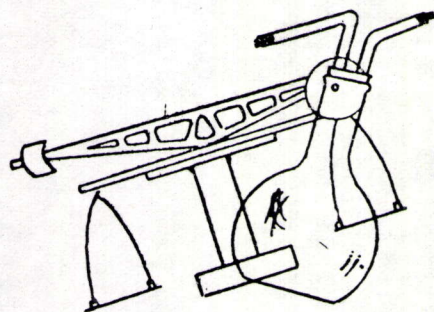
DOWNEY
#1 MINE

DOWNEY
#2 MINE

DELORES
RIVER
MIDDLE
CROSSING

Conductivity umhos/cm	2,270	2,050	3,650
Copper as Cu mg/l	.010	.020	.010
Cyanide as Cn mg/l	.005	.002	.004
Fluoride as F mg/l	.36	.27	.33
Hardness as CaCO ₃ mg/l	510	450	430
Iron as Fe (Total) mg/l	177.000	4.100	1.550
Lead as Pb mg/l	.001	.004	.009
MPN Fecal Coliform MPN/100 ml			33
MPN Total Coliform MPN/100 ml			170
Magnesium as Mg mg/l	48.00	45.60	45.60
Manganese as Mn mg/l	.020	.230	.310
Mercury as Hg mg/l	<.00020	<.00020	<.00020
Nickel as Ni mg/l	<.001	<.001	<.001
Nitrate as NO ₃ -N mg/l	1.23	1.00	1.32
Nitrite as NO ₂ -N mg/l	.03	.04	.02
Phosphate PO ₄ -P Ortho mg/l	.020	<.001	<.001
Potassium as K mg/l	11.30	12.80	35.00

REC'D. MDO MAY 18 1981



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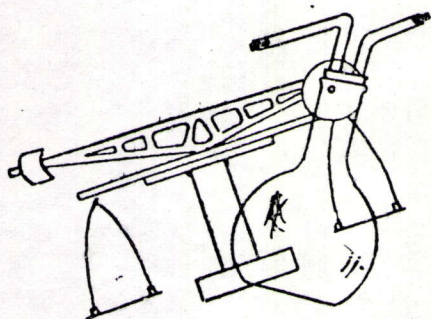
BUREAU OF LAND
MANAGEMENT
PO BOX 970
MOAB, UT 84532

81-004695

SAMPLE: WATERS RECEIVED 4-14-81 UNDER CONTRACT UT-060-CT9-014.

	DOWNEY #1 MINE	DOWNEY #2 MINE	DELORES RIVER MIDDLE CROSSING
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Alkalinity as CaCO ₃ mg/l	144.00	160.00	142.00
Aluminum as Al mg/l	.150	1.010	.620
Arsenic as As mg/l	.002	.003	.002
BOD 5 Day mg/l	74.0	22.0	26.0
Barium as Ba mg/l	.090	.080	.100
Bicarbonate as HCO ₃ mg/l	175.68	195.20	173.20
Boron as B mg/l	.180	.120	.150
Cadmium as Cd mg/l	<.001	.005	<.001
Calcium as Ca mg/l	124.00	104.00	96.00
Carbonate as CO ₃ mg/l	<.01	<.01	<.01
Chloride as Cl mg/l	380.00	360.00	1,080.00
Chromium as Cr mg/l	<.001	<.001	<.001
Cobalt as Co mg/l	.012	.005	<.001



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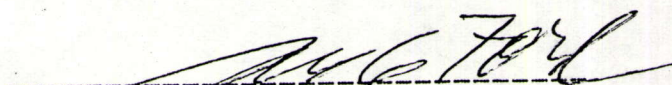
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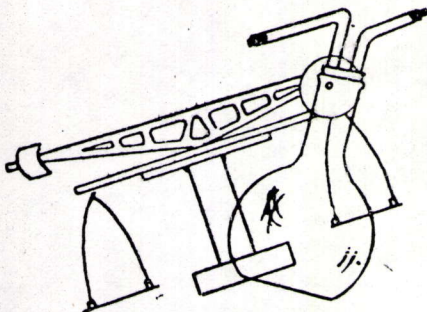
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	DOWNEY #1 MINE	DOWNEY #2 MINE	DELORES RIVER MIDDLE CROSSING
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Selenium as Se mg/l	.010	.007	.001
Silica as SiO ₂ Diss. Mg/l	6.05	5.20	4.95
Silver as Ag mg/l	.002	<.001	.007
Sodium as Na mg/l	320.00	295.00	705.00
Sulfate as SO ₄ mg/l	508	410	320
Suspended Solids mg/l	13,396	258	302
Total Dissolved Solids mg/l	1,485	1,320	2,375
Zinc as Zn mg/l	.003	.020	.020
pH Units	7.60	7.60	8.10


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CERTIFICATE OF ANALYSIS

81-004695-01

FORD CHEMICAL LABORATORIES

BALANCE SHEET FOR SAMPLE: (1) DOWNEY #1 MINE

CATIONS

	mg/l	meq/l
Calcium as Ca mg/l	124.000	6.188
Magnesium as Mg mg/l	48.000	3.948
Sodium as Na mg/l	320.000	13.920
Potassium as K mg/l	11.300	.289

ANIONS

	mg/l	meq/l
Carbonate as CO ₃ mg/l	.000	.000
Bicarbonate as HCO ₃ mg/l	175.680	2.881
Sulfate as SO ₄ mg/l	508.000	10.577
Chloride as Cl mg/l	380.000	10.720
Nitrate as NO ₃ -N mg/l	1.230	.020

BALANCE INFORMATION

CATIONS:	24.345
ANIONS:	24.198
TOTAL:	48.543
DIFFERENCE:	.147
SIGMA:	.003



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CERTIFICATE OF ANALYSIS

81-004695-02

FORD CHEMICAL LABORATORIES

BALANCE SHEET FOR SAMPLE: (2) DOWNEY #2 MINE

CATIONS	mg/l	meq/l
Calcium as Ca mg/l	104.000	5.190
Magnesium as Mg mg/l	45.600	3.751
Sodium as Na mg/l	295.000	12.833
Potassium as K mg/l	12.800	.327
ANIONS	mg/l	meq/l
Carbonate as CO ₃ mg/l	.000	.000
Bicarbonate as HCO ₃ mg/l	195.200	3.201
Sulfate as SO ₄ mg/l	410.000	8.536
Chloride as Cl mg/l	360.000	10.156
Nitrate as NO ₃ -N mg/l	1.000	.016

BALANCE INFORMATION

CATIONS:	22.101
ANIONS:	21.909
TOTAL:	44.010
DIFFERENCE:	.192
SIGMA:	.004